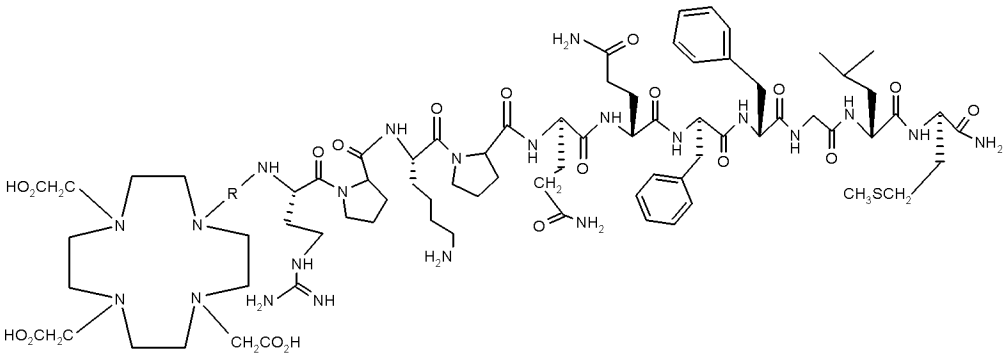
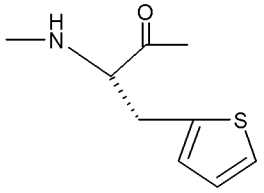
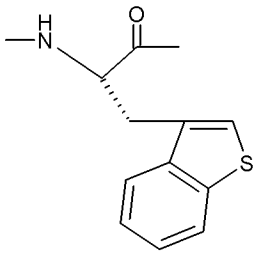
AMENDMENTS TO THE CLAIMS

Claim 1. (Withdrawn) A method of targeting a brain tumor, localizing or treating a brain tumor or a satellite lesion thereof in a host afflicted with brain tumor, comprising administering to the host a radio-nuclide labelled conjugate of substance P and a chelator molecule, having the abbreviation
Chelator-R-Arg^{1}- Pro^{2}-Lys^{3}-Pro^{4}-Gln^{5}-Gln^{6}-Phe^{7}-Phe^{8}-Gly^{9}-Leu^{10}-Met^{11}-NH_2 and the structure of formula I



(I),

wherein
R is -CH_2-C(O)-, -$CH(CO_2H)CH_2CH_2$-C(O)- or -$CH(CO_2H)CH_2$-C(O)-,
or an analogue of formula I with at least one of the following modifications in the amino acid sequence of substance P:
a) replacement of Met^{11} by -NH-$CH(CH_2CH_2$-SO_2-$CH_3)$-C(O)- (hereinafter abbreviated Met$(O_2)^{11}$),
-NH-$CH(CH_2CH_2$-SO-$CH_3)$-C(O)- (hereinafter abbreviated Met$(O)^{11}$), or -NH-$CH[CH(CH_3)CH_2CH_3)$-C(O)- (hereinafter abbreviated Ile^{11}),
b) replacement of Leu^{10} by -NH-$CH[CH(CH_3)CH_2CH_3)$-C(O)- (hereinafter abbreviated Ile^{10}),
c) replacement of Gly^{9} by -$N(CH_3)$-CH_2-C(O)- (hereinafter abbreviated Sar^{9}),
d) replacement of Phe^{7} or Phe^{8} or both Phe^{7} and Phe^{8} by a residue of formulae


(2-Thi[7,8]),

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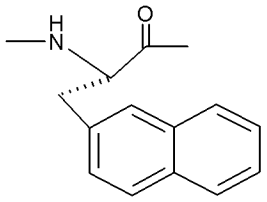
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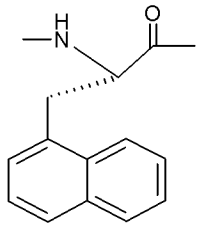
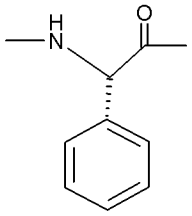
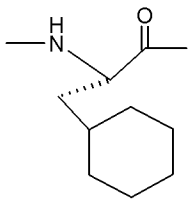
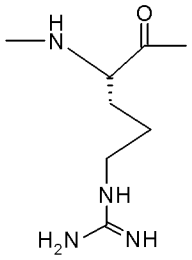
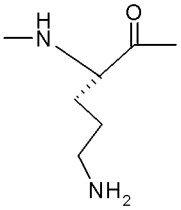

(1-Nal[7,8]),


(Phegly[7,8]),

(Cha[7,8]),

e) replacement of Lys[3] by residue of formulae


(Arg[3]), or

(Orn[3]),

f) truncation of 1 to 5 amino acids of the sequence Arg[1]- Pro[2]-Lys[3]-Pro[4]-Gln[5], or

g) replacement of 1 to 5 amino acids of the sequence Arg^1-Pro^2-Lys^3-Pro^4-Gln^5 by -$N(CH_3)$-CH_2-C(O)- (hereinafter abbreviated Sar),
and wherein the conjugate is labelled with a radio-nuclide selected from the group consisting of Actinium-225, Bismut-212, Bismut-213, Lead-203, Copper-64, Copper-67, Gallium-66, Gallium-67, Gallium-68, Lutetium-177, Indium-111, Indium-113, Yttrium-86 and Yttrium-90, Dyprosium-162, Dysprosium-165, Dysprosium-167, Holmium-166, Praseodymium-142, Praseodymium-143, Promethium-149, and Terbium-149.

Claim 2. (Withdrawn) The method according to claim 1, wherein the amino acid sequence of substance P is:

a) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Phe-Gly-Leu-Met-NH_2,

b) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Phe-Gly-Leu-Met(O_2)-NH_2,

c) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Phe-Sar-Leu-Met-NH_2,

d) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Thi-Gly-Leu-Met-NH_2,

e) Arg-Pro-Lys-Pro-Gln-Gln-Thi-Phe-Gly-Leu-Met-NH_2,

f) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Phe-Sar-Leu-Met(O_2)-NH_2,

g) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Thi-Gly-Leu-Met(O_2)-NH_2,

h) Arg-Pro-Lys-Pro-Gln-Gln-Thi-Phe-Gly-Leu-Met(O_2)-NH_2,

i) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Thi-Sar-Leu-Met(O_2)-NH_2,

j) Arg-Pro-Lys-Pro-Gln-Gln-Thi-Phe-Sar-Leu-Met-NH_2,

k) Arg-Pro-Lys-Pro-Gln-Gln-Thi-Phe-Sar-Leu-Met(O_2)-NH_2

l) Arg-Pro-Lys-Pro-Gln-Gln-Thi-Thi-Sar-Leu-Met-NH_2,

m) Arg-Pro-Lys-Pro-Gln-Gln-Thi-Thi-Sar-Leu-Met(O_2)-NH_2,

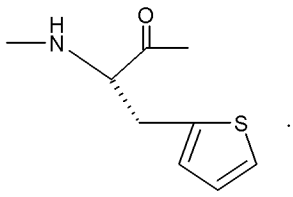
n) Arg-Pro-Lys-Pro-Gln-Gln-Thi-Thi-Gly-Leu-Met-NH_2, or

o) Arg-Pro-Lys-Pro-Gln-Gln-Thi-Thi-Gly-Leu-Met(O_2)-NH_2.

Claim 3. (Withdrawn) The method according to claim 1, wherein the compound of formula I comprises in the 11-position of the amino acid sequence of the substance P a methionine sulfone residue of formula -NH-CH(CH_2CH_2-SO_2-CH_3)-C(O)- instead of a methionine residue.

Claim 4. (Withdrawn) The method according to claim 1, wherein the glycine residue in position 9 of the amino acid sequence of the substance P is replaced by a sarcosine residue of formula -N(CH_3)-CH_2-C(O)-.

Claim 5. (Withdrawn) The method according to claim 1, wherein the phenylalanine residue in the 7- or 8-position or in both said positions of the amino acid sequence of substance P is replaced by a 3-(2-thienyl)-alanine residue of formula



Claim 6. (Withdrawn) The method according to claim 1, wherein the phenylalanine residue in the 8-position of the amino acid sequence of substance P is replaced by a 3-(2-thienyl)-alanine and the glycine residue in position 9 is replaced by a sarcosine residue.

Claim 7. (Withdrawn) The method according to claim 1, wherein the methionine residue in the 11-position of the amino acid sequence of substance P is replaced by a methionine sulfone residue, and the phenylalanine residue in the 8-position is replaced by a 3-(2-thienyl)-alanine residue, or the glycine residue in position 9 is replaced by a sarcosine residue.

Claim 8. (Withdrawn) The method according to claim 1, wherein the amino acid sequence in formula I is:

a) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Phe-Gly-Leu-Met(O_2)-NH_2,

b) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Phe-Sar-Leu-Met-NH_2,

c) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Thi-Gly-Leu-Met-NH_2,

d) Arg-Pro-Lys-Pro-Gln-Gln-Thi-Phe-Gly-Leu-Met-NH_2,

e) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Phe-Sar-Leu-Met(O_2)-NH_2,

f) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Thi-Gly-Leu-Met(O_2)-NH_2,

g) Arg-Pro-Lys-Pro-Gln-Gln-Thi-Thi-Gly-Leu-Met-NH_2, or

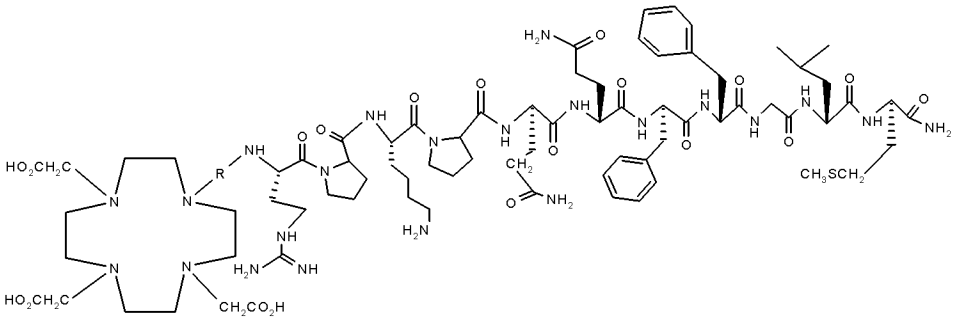
h) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Thi-Sar-Leu-Met(O_2)-NH_2.

Claim 9. (Withdrawn) The method according to claim 1, wherein the amino acid sequence in formula I is:

a) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Phe-Sar-Leu-Met(O_2)-NH_2, or

b) Arg-Pro-Lys-Pro-Gln-Gln-Phe-Thi-Gly-Leu-Met(O_2)-NH_2.

Claim 10. (Withdrawn) A method of targeting a brain tumor, localizing or treating a brain tumor or a satellite lesion thereof in a host afflicted with brain tumor, which comprises administering to the host at least one conjugate of substance P and a chelator molecule, having the abbreviation Chelator-R-Arg^1-Pro^2-Lys^3-Pro^4-Gln^5-Gln^6-Phe^7-Phe^8-Gly^9-Leu^{10}-Met^{11}-NH_2 and the structure of formula I



(I),

wherein

R is $-CH_2-C(O)-$, $-CH(CO_2H)CH_2CH_2-C(O)-$ or $-CH(CO_2H)CH_2-C(O)-$,

or an analogue of formula I with at least one of the following modifications in the amino acid sequence of substance P:

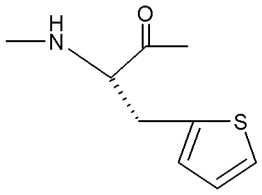
a) replacement of Met^{11} by $-NH-CH(CH_2CH_2-SO_2-CH_3)-C(O)-$ (hereinafter abbreviated $Met(O_2)^{11}$),

$-NH-CH(CH_2CH_2-SO-CH_3)-C(O)-$ (hereinafter abbreviated $Met(O)^{11}$), or $-NH-CH[CH(CH_3)CH_2CH_3)-C(O)-$ (hereinafter abbreviated Ile^{11}),

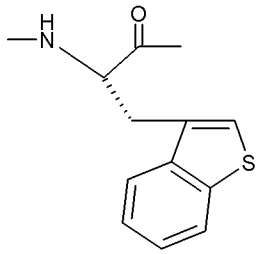
b) replacement of Leu^{10} by $-NH-CH[CH(CH_3)CH_2CH_3)-C(O)-$ (hereinafter abbreviated Ile^{10}),

c) replacement of Gly^9 by $-N(CH_3)-CH_2-C(O)-$ (hereinafter abbreviated Sar^9),

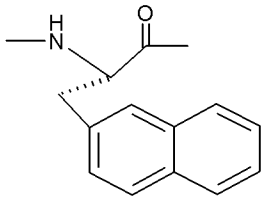
d) replacement of Phe^7 or Phe^8 or both Phe^7 and Phe^8 by a residue of formulae



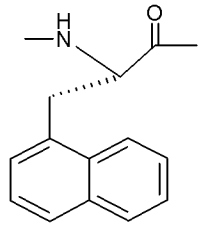
(2-$Thi^{7,8}$),



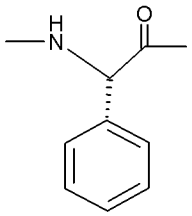
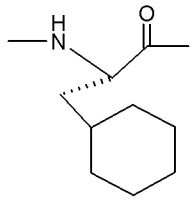
(3-$BzThi^{7,8}$),



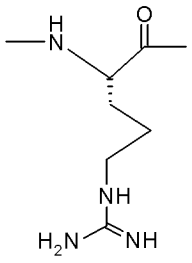
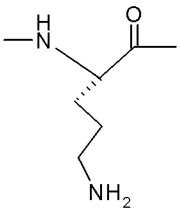
(2-$Nal^{7,8}$),



(1-$Nal^{7,8}$),

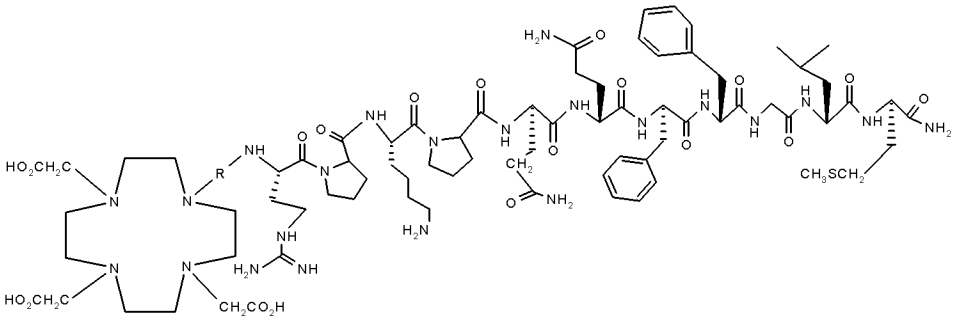

(Phegly^{7,8}),

(Cha^{7,8}),

e) replacement of Lys^{3} by residue of formulae


(Arg^{3}), or

(Orn^{3}),

f) truncation of 1 to 5 amino acids of the sequence Arg^{1}- Pro^{2}-Lys^{3}-Pro^{4}-Gln^{5}, or
g) replacement of 1 to 5 amino acids of the sequence Arg^{1}- Pro^{2}-Lys^{3}-Pro^{4}-Gln^{5} by -N(CH_3)-CH_2-C(O)- (hereinafter abbreviated Sar).

Claim 11. (Withdrawn) A therapeutic or diagnostic method for targeting a brain tumor, localizing or treating a brain tumor or a satellite lesion thereof in a mammal, comprising administering to a mammal in need of such therapy, an effective amount of a radio-nuclide labelled conjugate of substance P and a chelator molecule, having the abbreviation
Chelator-R-Arg^{1}-Pro^{2}-Lys^{3}-Pro^{4}-Gln^{5}-Gln^{6}-Phe^{7}-Phe^{8}-Gly^{9}-Leu^{10}-Met^{11}-NH_2 and the structure of formula I



(I),

wherein

R is $-CH_2-C(O)-$, $-CH(CO_2H)CH_2CH_2-C(O)-$ or $-CH(CO_2H)CH_2-C(O)-$,

or an analogue of formula I with at least one of the following modifications in the amino acid sequence of substance P:

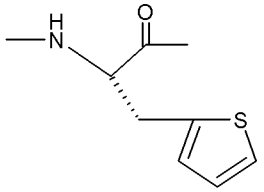
a) replacement of Met^{11} by $-NH-CH(CH_2CH_2-SO_2-CH_3)-C(O)-$ (hereinafter abbreviated $Met(O_2)^{11}$),

$-NH-CH(CH_2CH_2-SO-CH_3)-C(O)-$ (hereinafter abbreviated $Met(O)^{11}$), or $-NH-CH[CH(CH_3)CH_2CH_3)-C(O)-$ (hereinafter abbreviated Ile^{11}),

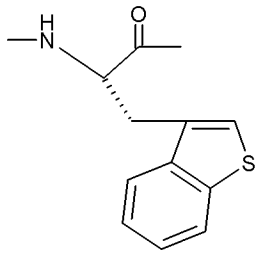
b) replacement of Leu^{10} by $-NH-CH[CH(CH_3)CH_2CH_3)-C(O)-$ (hereinafter abbreviated Ile^{10}),

c) replacement of Gly^9 by $-N(CH_3)-CH_2-C(O)-$ (hereinafter abbreviated Sar^9),

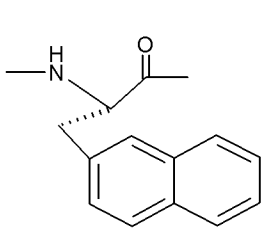
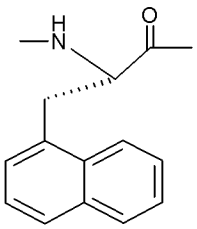
d) replacement of Phe^7 or Phe^8 or both Phe^7 and Phe^8 by a residue of formulae

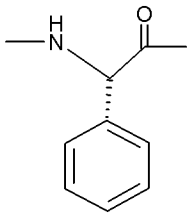
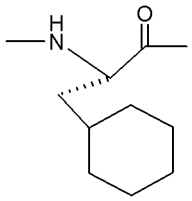


(2-$Thi^{7,8}$),

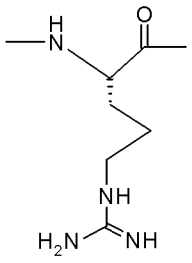
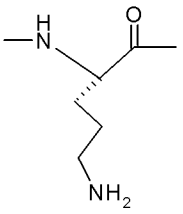


(3-$BzThi^{7,8}$),


(2-Nal^{7,8}),

(1-Nal^{7,8}),


(Phegly^{7,8}),

(Cha^{7,8}),

e) replacement of Lys^3 by residue of formulae


(Arg^3), or

(Orn^3),

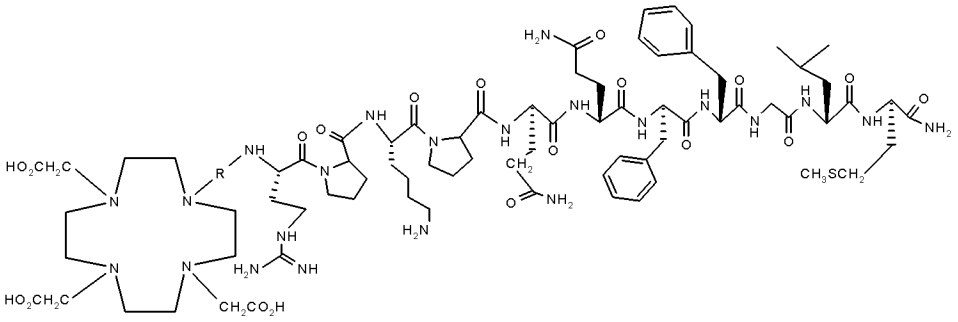
f) truncation of 1 to 5 amino acids of the sequence Arg^1- Pro^2-Lys^3-Pro^4-Gln^5, or

g) replacement of 1 to 5 amino acids of the sequence Arg^1- Pro^2-Lys^3-Pro^4-Gln^5 by -N(CH_3)-CH_2-C(O)- (hereinafter abbreviated Sar),

and wherein the conjugate is labelled with a radio-nuclide selected from the group consisting of Actinium-225, Bismut-212, Bismut-213, Lead-203, Copper-64, Copper-67, Gallium-66, Gallium-67, Gallium-68, Lutetium-177, Indium-111, Indium-113, Yttrium-86 and Yttrium-90, Dyprosium-162, Dysprosium-165, Dysprosium-167, Holmium-166, Praseodymium-142, Praseodymium-143, Promethium-149, and Terbium-149.

Claim 12. (Withdrawn) A method of delivering a radio-nuclide labelled substance P conjugate of formula I or an analogue thereof to a host, comprising administering to a host a radio-nuclide labelled conjugate of substance P and a chelator molecule, having the abbreviation

Chelator-R-Arg^{1}-Pro^{2}-Lys^{3}-Pro^{4}-Gln^{5}-Gln^{6}-Phe^{7}-Phe^{8}-Gly^{9}-Leu^{10}-Met^{11}-NH_2 and the structure of formula I



(I),

wherein

R is $-CH_2-C(O)-$, $-CH(CO_2H)CH_2CH_2-C(O)-$ or $-CH(CO_2H)CH_2-C(O)-$,

or an analogue of formula I with at least one of the following modifications in the amino acid sequence of substance P:

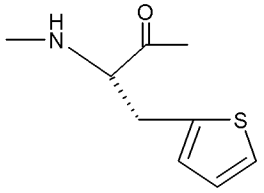
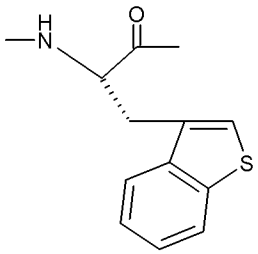
a) replacement of Met^{11} by $-NH-CH(CH_2CH_2-SO_2-CH_3)-C(O)-$ (hereinafter abbreviated Met$(O_2)^{11}$),

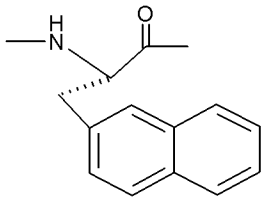
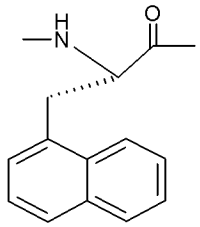
$-NH-CH(CH_2CH_2-SO-CH_3)-C(O)-$ (hereinafter abbreviated Met$(O)^{11}$), or $-NH-CH[CH(CH_3)CH_2CH_3)-C(O)-$ (hereinafter abbreviated Ile^{11}),

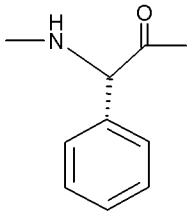
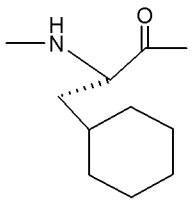
b) replacement of Leu^{10} by $-NH-CH[CH(CH_3)CH_2CH_3)-C(O)-$ (hereinafter abbreviated Ile^{10}),

c) replacement of Gly^{9} by $-N(CH_3)-CH_2-C(O)-$ (hereinafter abbreviated Sar^{9}),

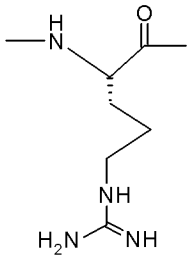
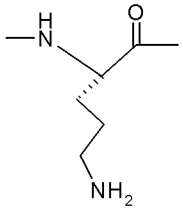
d) replacement of Phe^{7} or Phe^{8} or both Phe^{7} and Phe^{8} by a residue of formulae


(2-Thi[7,8]),

(3-BzThi[7,8]),


(2-Nal[7,8]),

(1-Nal[7,8]),


(Phegly[7,8]),

(Cha[7,8]),

e) replacement of Lys[3] by residue of formulae

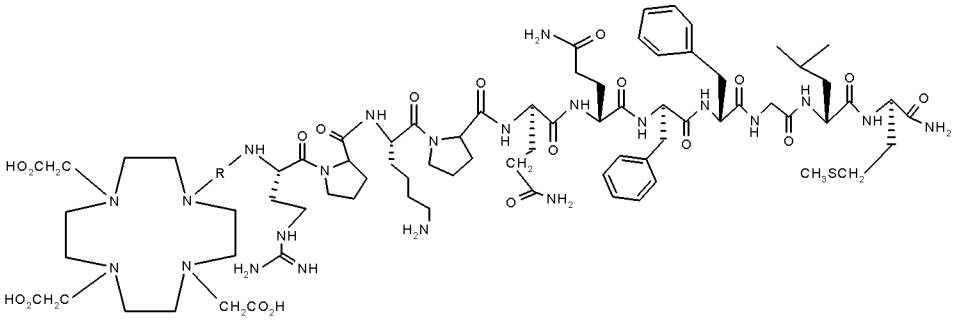

(Arg[3]), or

(Orn[3]),

f) truncation of 1 to 5 amino acids of the sequence Arg[1]- Pro[2]-Lys[3]-Pro[4]-Gln[5], or

g) replacement of 1 to 5 amino acids of the sequence Arg^1-Pro^2-Lys^3-Pro^4-Gln^5 by -$N(CH_3)$-CH_2-C(O)- (hereinafter abbreviated Sar),

and wherein the conjugate is labeled with a radio-nuclide selected from the group consisting of Actinium-225, Bismut-212, Bismut-213, Lead-203, Copper-64, Copper-67, Gallium-66, Gallium-67, Gallium-68, Lutetium-177, Indium-111, Indium-113, Yttrium-86 and Yttrium-90, Dyprosium-162, Dysprosium-165, Dysprosium-167, Holmium-166, Praseodymium-142, Praseodymium-143, Promethium-149, and Terbium-149.

Claim 13. (Withdrawn) A method for the manufacture of a medicament useful for the detection and therapeutic treatment of a brain tumor or satellite lesion thereof in a mammal, which comprises mixing a radio-nuclide labelled conjugate of substance P and a chelator molecule, having the abbreviation Chelator-R-Arg^1-Pro^2-Lys^3-Pro^4-Gln^5-Gln^6-Phe^7-Phe^8-Gly^9-Leu^{10}-Met^{11}-NH_2 and the structure of formula I



(I),

wherein

R is -CH_2-C(O)-, -$CH(CO_2H)CH_2CH_2$-C(O)- or -$CH(CO_2H)CH_2$-C(O)-,

or an analogue of formula I with at least one of the following modifications in the amino acid sequence of substance P:

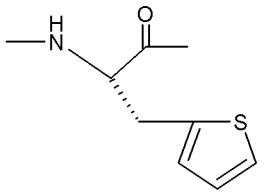
a) replacement of Met^{11} by -NH-$CH(CH_2CH_2$-SO_2-$CH_3)$-C(O)- (hereinafter abbreviated $Met(O_2)^{11}$),

-NH-CH(CH_2CH_2-SO-CH_3)-C(O)- (hereinafter abbreviated $Met(O)^{11}$), or -NH-CH[$CH(CH_3)CH_2CH_3$)-C(O)- (hereinafter abbreviated Ile^{11}),

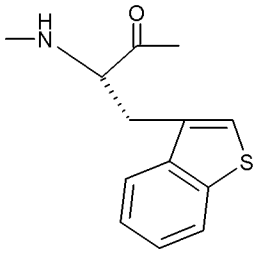
b) replacement of Leu^{10} by -NH-CH[$CH(CH_3)CH_2CH_3$)-C(O)- (hereinafter abbreviated Ile^{10}),

c) replacement of Gly^9 by -N(CH_3)-CH_2-C(O)- (hereinafter abbreviated Sar^9),

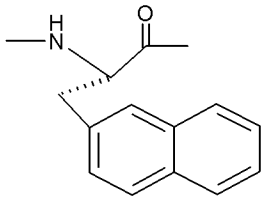
d) replacement of Phe^7 or Phe^8 or both Phe^7 and Phe^8 by a residue of formulae



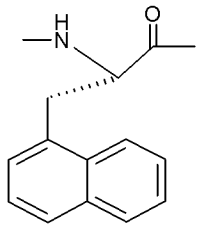
(2-$Thi^{7,8}$),



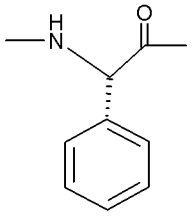
(3-$BzThi^{7,8}$),



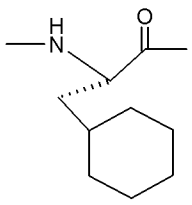
(2-$Nal^{7,8}$),



(1-$Nal^{7,8}$),

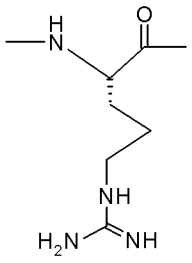


(Phegly^{7,8}),

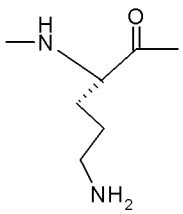


(Cha^{7,8}),

e) replacement of Lys^3 by residue of formulae



(Arg^3), or



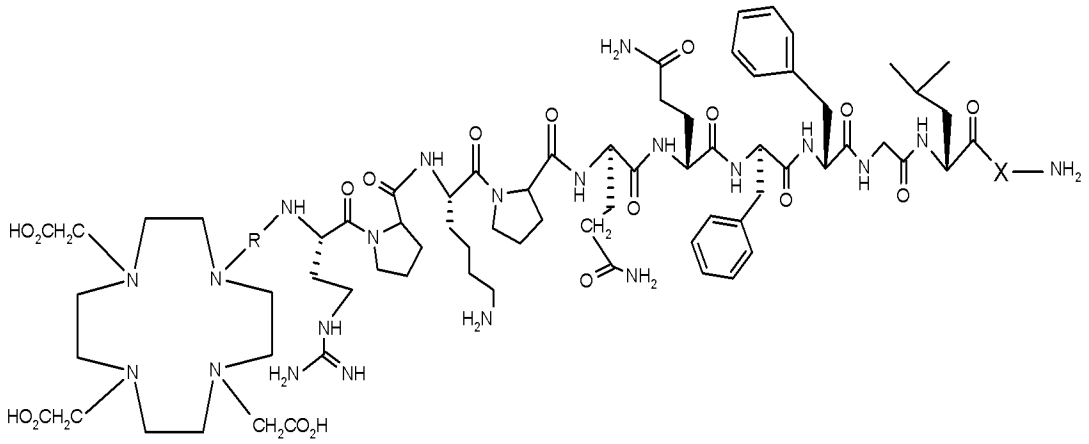
(Orn^3),

f) truncation of 1 to 5 amino acids of the sequence Arg^1- Pro^2-Lys^3-Pro^4-Gln^5, or
g) replacement of 1 to 5 amino acids of the sequence Arg^1- Pro^2-Lys^3-Pro^4-Gln^5 by -N(CH_3)-CH_2-C(O)- (hereinafter abbreviated Sar),
and wherein the conjugate is labelled with a radio-nuclide selected from the group consisting of Actinium-225, Bismut-212, Bismut-213, Lead-203, Copper-64, Copper-67, Gallium-66, Gallium-67, Gallium-68, Lutetium-177, Indium-111, Indium-113, Yttrium-86 and Yttrium-90, Dyprosium-162, Dysprosium-165, Dysprosium-167, Holmium-166, Praseodymium-142, Praseodymium-143, Promethium-149, and Terbium-149;

with a pharmaceutical carrier.

Claims 14-16. (Cancelled)

Claim 17. (Previously Presented) A conjugate of a substance P analogue and a chelator molecule, having the abbreviation
Chelator-R-Arg^1- Pro^2-Lys^3-Pro^4-Gln^5-Gln^6-Phe^7-Phe^8-Gly^9-Leu^{10}-X^{11}-NH_2 and the structure of formula II



(II),

wherein

R is $-CH_2-C(O)-$, $-CH(CO_2H)CH_2CH_2-C(O)-$ or $-CH(CO_2H)CH_2-C(O)-$ and

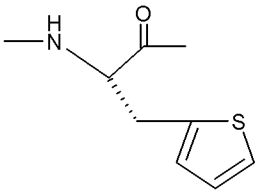
X is $-NH-CH(CH_2CH_2-SO_2-CH_3)-C(O)-$ (hereinafter abbreviated $Met(O_2)^{11}$), $-NH-CH(CH_2CH_2-SO-CH_3)-C(O)-$ (hereinafter abbreviated $Met(O)^{11}$), or $-NH-CH[CH(CH_3)CH_2CH_3)-C(O)-$ (hereinafter abbreviated Ile^{11}),

or an analogue of formula II with at least one of the following modifications in the amino acid sequence of substance P analogue:

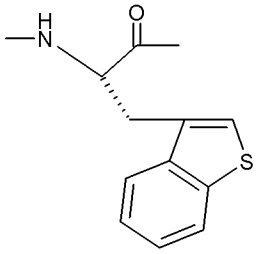
a) replacement of Leu^{10} by $-NH-CH(CH(CH_3)CH_2CH_3)-C(O)-$ (hereinafter abbreviated Ile^{10}),

b) replacement of Gly^9 by $-N(CH_3)-CH_2-C(O)-$ (hereinafter abbreviated Sar^9),

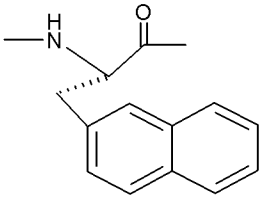
c) replacement of Phe^7 or Phe^8 or both Phe^7 and Phe^8 by a residue of formulae



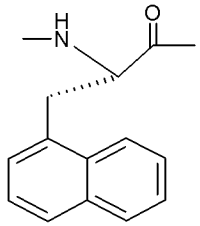
(2-$Thi^{7,8}$),



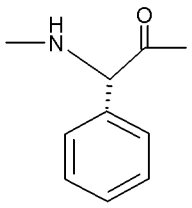
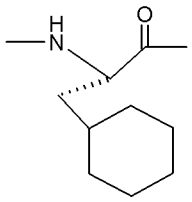
(3-$BzThi^{7,8}$),



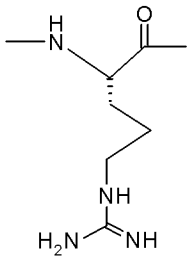
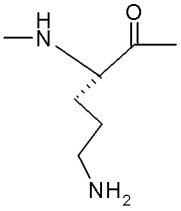
(2-$Nal^{7,8}$),



(1-$Nal^{7,8}$),


(Phegly^{7,8}),

(Cha^{7,8}),

d) replacement of Lys^{3} by residue of formulae


(Arg^{3}), or

(Orn^{3}),

e) truncation of 1 to 5 amino acids of the sequence Arg^{1}- Pro^{2}-Lys^{3}-Pro^{4}-Gln^{5}, or
f) replacement of 1 to 5 amino acids of the sequence Arg^{1}- Pro^{2}-Lys^{3}-Pro^{4}-Gln^{5} by -N(CH_3)-CH_2-C(O)- (hereinafter abbreviated Sar),
and wherein the conjugate is unlabelled or labeled with a radio-nuclide selected from the group consisting of Actinium-225, Bismut-212, Bismut-213, Lead-203, Copper-64, Copper-67, Gallium-66, Gallium-67, Gallium-68, Lutetium-177, Indium-111, Indium-113, Yttrium-86 and Yttrium-90, Dyprosium-162, Dysprosium-165, Dysprosium-167, Holmium-166, Praseodymium-142, Praseodymium-143, Promethium-149, and Terbium-149.

Claim 18. (Previously Presented) The conjugate of claim 17 wherein
X is -NH-CH(CH_2CH_2-SO_2-CH_3)-C(O)- (hereinafter abbreviated Met(O_2)^{11}).

Claim 19. (Previously Presented) A composition comprising at least one pharmaceutical carrier and at least one conjugate according to claim 17.

Claim 20. (Previously Presented) A composition comprising at least one pharmaceutical carrier and at least one conjugate according to claim 18.

Claim 21. (Withdrawn) A method of targeting a brain tumor or treating a brain tumor in a host afflicted with brain tumor, comprising administering to the host a conjugate of claim 17.

Claim 22. (Withdrawn) A method of targeting a glioma or treating a glioma in a host afflicted with glioma, comprising administering to the host a conjugate of claim 17.

Claim 23. (Withdrawn) A method of targeting a brain tumor or treating a brain tumor in a host afflicted with brain tumor, comprising administering to the host a conjugate of claim 18.

Claim 24. (Withdrawn) A method of targeting a glioma or treating a glioma in a host afflicted with glioma, comprising administering to the host a conjugate of claim 18.

Claim 25. (Withdrawn) The method of claim 21, wherein the conjugate is administered by loco-regional application to a tumor center or into a resection cavity of the host.

Claim 26. (Withdrawn) The method of claim 22, wherein the conjugate is administered by loco-regional application to a tumor center or into a resection cavity of the host.

Claim 27. (Withdrawn) The method of claim 23, wherein the conjugate is administered by loco-regional application to a tumor center or into a resection cavity of the host.

Claim 28. (Withdrawn) The method of claim 24, wherein the conjugate is administered by loco-regional application to a tumor center or into a resection cavity of the host.

Claim 29. (Currently Amended) A method for the manufacture of a radiopharmaceutical or radiodiagnostic formulation useful for targeting a brain tumor or

treating a brain tumor in a host afflicted with brain tumor, which comprises ~~a radio-nuclide labeled conjugate of claim 17~~

(a) preparing a suitable substance P analogue in a side chain protected form by solid phase peptide synthesis;

(b) coupling the side chain protected substance P analogue with a prochelator selected from the group consisting of DOTAGA(^{t}Bu)$_4$, DOTASA(^{t}Bu)$_4$, and DOTA(^{t}Bu)$_3$ to obtain a protected conjugate;

(c) cleaving the protected conjugate from resin and removing the protection groups to obtain an unlabelled conjugate of claim 17; and

(d) labeling the unlabelled conjugate with a radionuclide to obtain a labeled conjugate of claim 17.

Claim 30. (Currently Amended) A method for the manufacture of a radiopharmaceutical or radiodiagnostic formulation useful for targeting a brain tumor or treating a brain tumor in a host afflicted with brain tumor, which comprises ~~a radio-nuclide labeled conjugate of claim 18~~

(a) preparing a suitable substance P analogue in a side chain protected form by solid phase peptide synthesis;

(b) coupling the side chain protected substance P analogue with a prochelator selected from the group consisting of DOTAGA(^{t}Bu)$_4$, DOTASA (^{t}Bu)$_4$, and DOTA (^{t}Bu)$_3$ to obtain a protected conjugate;

(c) cleaving the protected conjugate from resin and removing the protection groups to obtain an unlabelled conjugate of claim 18; and

(d) labeling the unlabelled conjugate with a radionuclide to obtain a labeled conjugate of claim 18.